

Notice of Allowability**Application No.**

10/580,606

Applicant(s)

HARADA ET AL.

Examiner

LATANYA CRAWFORD

Art Unit

2813

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to correspondence filed on 12/07/2010.
2. ☒ The allowed claim(s) is/are 1-8, 11-31 and 38-78.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date ____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 20110212.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.

/Matthew C. Landau/
Supervisory Patent Examiner, Art Unit 2813

DETAILED ACTION

1. This office action is in response to the correspondence filed on 12/7/2010. Currently, claims 1-8, 11-31 & 38-78 are pending. Claims 9-10 & 32-37 are cancelled.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mike Whitham on Feb. 22, 2011.

The application has been amended as follows:

In claim 1, line 4, and pp. 2: After the words "a side chain of" delete "the skeleton" and insert --one of said silicon and oxygen skeletons--.

In claim 2, line 3, and pp. 2: After the words "a side chain of" delete "the skeleton" and insert -- one of said silicon and oxygen skeletons--.

In claim 46, line 4, pp. 9: After the words "a side chain of" delete "the skeleton" and insert --one of said silicon and oxygen skeletons--.

In claim 64, line 5, pp. 12: After the words "a side chain of" delete "the skeleton" and insert --one of said silicon and oxygen skeletons--.

In claim 74, line 3, pp. 14: After the words "a side chain of" delete "the skeleton" and insert --one of said silicon and oxygen skeletons--.

Notice of Allowance

3. Claims 1, 5-7, 11-17, 19-21, & 40 allowed.
4. The following is an examiner's statement of reasons for allowance: The prior art of record does not anticipate nor render obvious limitations of base claim 1 including: wherein said plasma is plasma of mixture gas of rare and hydrogenated silicon gas as instantly claimed in combination with the remaining elements of the claim was not found in prior art.
5. Claims 2, 3, 4,8,18, 22, 30,31,38,41 are allowed.
6. The following is an examiner's statement of reasons for allowance: The prior art of record does not anticipate nor render obvious limitations of base claim 2 including: wherein said plasma is plasma of mixture gas of rare and hydrogenated silicon gas as instantly claimed in combination with the remaining elements of the claim was not found in prior art.
7. Claims 23-31 & 42-45 are allowed.
8. The following is an examiner's statement of reasons for allowance: The prior art of record does not anticipate nor render obvious limitations of base claims 23 including: wherein a concentration of carbon in the vicinity of the surface of the porous insulating film changes continuously or stepwise as instantly claim in combination with the remaining elements of the claim was not found in prior art.
- 9.
10. Claims 46-73 are allowed.

11. The following is an examiner's statement of reasons for allowance: The prior art of record does not anticipate nor render obvious limitations of base claims 46 & 64 including: wherein said cyclic organic silica compounds have a saturated hydrocarbon group with another side chain of said skeleton, and wherein said saturated hydrocarbon group has at least two carbon atoms as instantly claim in combination with the remaining elements of the claim was not found in prior art.

12. Claims 74-78 are allowed.

13. The following is an examiner's statement of reasons for allowance: The prior art of record does not anticipate nor render obvious limitations of base claim 74 including: wherein said saturated hydrocarbon group has at least two carbon atoms as instantly claim in combination with the remaining elements of the claim.

14. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LATANYA CRAWFORD whose telephone number is (571)270-3208. The examiner can normally be reached on Monday-Friday 7:30 AM - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Landau can be reached on (571)-272-1731. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew C. Landau/
Supervisory Patent Examiner, Art
Unit 2813

/LaTanya Crawford/
Examiner, Art Unit 2813